December 14, 2012

Richard Mendolia, Project Manager Groundwater Section Arizona Department of Environmental Quality 1110 W Washington Street, MC5415B-3 Phoenix, AZ 85007

RE: Curis Temporary Permit P-106360

Dear Mr. Mendolia,

We are residents of Arizona and live at FOIA Exemption 6

We are extremely concerned with the position the ADEQ has taken by issuing a temporary permit to Curis to operate a "test" project on State land in Florence prior to any discussion with the residents of Florence or holding public hearings prior to issuing such permit. The ADEQ is charged with protecting the health of the citizens of Arizona when it comes to our most precious commodity which is water. No matter what political pressure is applied to you and the ADEQ team to give Curis approval to "test" their proposed mining method, there must be a thorough analysis of their proposal from a reasonable and scientific standpoint. We believe that an analysis could only have one result - the Curis application should be repealed.

These are our concerns that we feel have not been adequately addressed by the ADEQ:

Curis says that the in-situ process of mining is a proven technique and is safe. According to the United States Geological Survey, NOT ONE in-situ mining operation in the United States has restored water quality to pre-mining conditions. Is that clear? Not even one commercial mining operation using the in-situ process has ever left groundwater without some form of contamination. Certainly using the amount of sulfuric acid in our back yard that is proposed by Curis, 5 to 15 billion pounds, either for a test pilot or commercial operation will affect our water quality.

The pilot "test" proposed by Curis doesn't even resemble the actual proposed commercial mining operation proposal. How can we allow a "test" when the "test" does not compare apples with apples? The "test" results will provide no relative conclusions from which a permit for commercial operation can be made. Why then are we considering giving Curis approval for a "test" in the first place?

The proposed time period for monitoring by Curis doesn't fit with the actual time it takes for water quality testing to have any merit. Most of the groundwater contamination will take longer than one year plus one additional year to appear except directly next to the well sites. As we all know, the ground is fractured in this area and it may take years for any contamination to reach outside the test area. Curis also proposed testing every six months at their monitoring sites. This should be done on a much more timely and consistent basis to properly address any contamination that occurs. Why not every week or month at a minimum? Some of Curis' monitoring wells are too far from the injection

sites. Once again, how can you properly monitor water quality when the time it takes for the contamination to occur at this distance is obviously longer than six months or maybe even six years?

Curis says that their proposed "test" will not be at the same level as our groundwater level so the quality of our water cannot be impacted. Johnson Utilities has water wells adjacent to the aquifer Curis has proposed to inject sulfuric acid into. Johnson Utilities is also planning to install additional wells to serve the increase in population in the area. These aquifers will certainly be affected by a pilot "test" or commercial operation.

The water quality standards proposed by Curis do NOT meet the current water quality standards required by our water providers. How can any "test" allow lower standards than what we allow our water providers to maintain? It is ludicrous to think that ADEQ would allow this in the first place, the department charged with protecting our water.

There have been hundreds of test wells drilled in this area. How can we be sure that the injection of sulfuric acid and resulting extraction of acid and copper won't become affected by these wells? We know there are maps showing some of the wells but not all. How can we protect our water without knowing where each well is located and until each well is sealed properly to avoid any chance of contamination? Once again, the land in this area is fractured and any contaminants will seek the path of least resistance which could involve these wells.

Curis has repeatedly used the prior BHP results as proof of a safe mining operation at this same area. However, the "test" from the 1990 pilot of 13 injection wells found the water quality exceeded established water quality standards in 26 separate cases. This is the opposite of proof.

Curis has proposed assurance in the form of a bond to protect this "test". Does this bond protect just the "test" area or outside the "test" area where we live? Does it protect the residents outside the "test" area should there be any form of contamination or spill of acid and to what extent?

We expect the ADEQ to protect the citizens of Arizona. This proposed "test" is nothing but a sham of promises and half-truths. Unfortunately some of our elected officials, representatives, and business owners either don't understand or care about the truth and the long term effects of improper mining to our water and the quality of life

Please protect our future by repealing the temporary permit issued to Curis.

Arne Hawkins and Judy Grove FOIA Exemption 6